How much does the mode of response matter?
A comparison of online and offline responses when examining sensitive issues

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Introduction and the aim

In an attempt to solve the problems of rising data-collection costs and declining response rates, survey researchers have utilized cheaper and easier data collection methods, especially those focusing on various types of online data.

Current research on survey methodology has criticized sample-to-population representativeness of many online surveys. At the same time, however, research on how the mode of data collection (paper-and-pencil vs. computerized) affects to responses is almost completely lacking.

Our aim was to examine whether the survey responses using a Web-questionnaire are different from the mail-questionnaire responses when examining respondents’ attitudes towards immigrants.

Research questions:
1. How did the response mode associate with positive and negative immigration attitudes in Finland and Norway?
2. To what extent were response mode effects explained by socio-demographic factors?
3. How did response mode interact with demographic factors?

Methodology

Data: ISSP 2013

<table>
<thead>
<tr>
<th></th>
<th>Finland, %</th>
<th>Norway, %</th>
<th>Total, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail responses</td>
<td>43</td>
<td>61</td>
<td>53</td>
</tr>
<tr>
<td>Web responses</td>
<td>57</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td>N (aged 18-74)</td>
<td>1186</td>
<td>1517</td>
<td>2703</td>
</tr>
</tbody>
</table>

\[
\Rightarrow \text{OLS regression (country fixed effects controlled for age, gender, occupation, education and residence)}
\]

Dependent variables: Sum variables of attitudes towards immigrants (positive and negative dimensions)

<table>
<thead>
<tr>
<th>Loadings</th>
<th>Original questions.</th>
<th>Immigrants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>increase crime rates</td>
<td>0.52</td>
<td>0.48</td>
</tr>
<tr>
<td>take jobs away from native</td>
<td>0.51</td>
<td>0.46</td>
</tr>
<tr>
<td>undermine culture</td>
<td>0.53</td>
<td>0.45</td>
</tr>
<tr>
<td>illegal should be excluded</td>
<td>0.50</td>
<td>0.43</td>
</tr>
<tr>
<td>generally good for economy</td>
<td>0.54</td>
<td>0.38</td>
</tr>
<tr>
<td>should have equal access to education</td>
<td>0.52</td>
<td>0.39</td>
</tr>
<tr>
<td>should have same rights</td>
<td>0.55</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Cronbach Alpha

- Finnish: 0.73
- Norwegian: 0.70

Variance explained (%)

- Finnish: 26
- Norwegian: 24

Results:

RQ1

RQ2

RQ3

Conclusions:

There was a statistically significant difference between response modes when analysing negative attitudes (but not for positive): respondents tend to answer more negatively towards immigration via mail-questionnaire than Web-questionnaire.

The results indicate that the mode of response is associated with socio-demographic background, and therefore, the response mode has an impact on responses.

In this respect, online surveys are threatened by potential coverage error. Measurement errors are also possible due to response mode effects when analyzing (more sensitive) negative attitudes.

We suggest that the mixed-mode survey is a reliable method of data collection especially after controlling for background variables and response mode effects.